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RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/080,943

DATE: 10/22/2002

TIME: 10:04:22

Input Set : A:\Iu99-pct.app

Output Set: N:\CRF4\10222002\J080943.raw

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3 <110> APPLICANT: Field, Loren J.
4      Tsai, Shih-Chong
6 <120> TITLE OF INVENTION: P193 PROTEINS AND NUCLEIC ACIDS, AND USES THEREOF
8 <130> FILE REFERENCE: IU99-PCT
C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/080,943
C--> 11 <141> CURRENT FILING DATE: 2002-10-09
13 <150> PRIOR APPLICATION NUMBER: 60/150,266
14 <151> PRIOR FILING DATE: 1999-08-23
16 <160> NUMBER OF SEQ ID NOS: 4
18 <170> SOFTWARE: PatentIn Ver. 2.1
20 <210> SEQ ID NO: 1
21 <211> LENGTH: 5217
22 <212> TYPE: DNA
23 <213> ORGANISM: Mus musculus
25 <220> FEATURE:
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27 <222> LOCATION: (62)..(5128)
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32 g atg gta ggg gag cta cga tac agg gaa ttc agg gtg ccc ctg ggg cct 109
33 Met Val Gly Glu Leu Arg Tyr Arg Glu Phe Arg Val Pro Leu Gly Pro
34 1 5 10 15
36 ggc ttg cac gcg tat ccg gat gaa ttg atc cgc caa cgg gtt ggc cat 157
37 Gly Leu His Ala Tyr Pro Asp Glu Leu Ile Arg Gln Arg Val Gly His
38 20 25 30
40 aat ggg cac ccc gag tat cag atc cgc tgg ctc atc ctc agg cgc ggg 205
41 Asn Gly His Pro Glu Tyr Gln Ile Arg Trp Leu Ile Leu Arg Arg Gly
42 35 40 45
44 gat gat ggg gac cgg gac tct aca gtg gac tgc aag gct gag cat atc 253
45 Asp Asp Gly Asp Arg Asp Ser Thr Val Asp Cys Lys Ala Glu His Ile
46 50 55 60
48 ctg tta tgg atg tct gac gat gag atc tat gcc aac tgc cac aag atg 301
49 Leu Leu Trp Met Ser Asp Asp Glu Ile Tyr Ala Asn Cys His Lys Met
50 65 70 75 80
52 ctg ggc gag aat ggc caa gtc atc gca cct tcc cgg gag tcc act gag 349
53 Leu Gly Glu Asn Gly Gln Val Ile Ala Pro Ser Arg Glu Ser Thr Glu
54 85 90 95
56 gca ggg gcc ctc gac aag tct gtg ctg ggg gag atg gaa aca gat gtg 397
57 Ala Gly Ala Leu Asp Lys Ser Val Leu Gly Glu Met Glu Thr Asp Val
58 100 105 110
60 aag tcc ttg att cag agg gcc ctt cgg cag ctg gag gag tgc gtg ggc 445
61 Lys Ser Leu Ile Gln Arg Ala Leu Arg Gln Leu Glu Glu Cys Val Gly
62 115 120 125

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64 acc gtg cct cct gcc cct ctc ctt cac acg gtc cat gta ctc agt gcc 493
65 Thr Val Pro Pro Ala Pro Leu Leu His Thr Val His Val Leu Ser Ala
66      130      135      140
68 tat gcc agc atc gag ccc ctc act ggc atc ttc aaa gac cgc agg gtt 541
69 Tyr Ala Ser Ile Glu Pro Leu Thr Gly Ile Phe Lys Asp Arg Arg Val
70 145      150      155      160
72 gtg aac ttg ctc atg cac atg ttg agc agt cct gat tat cag atc cgc 589
73 Val Asn Leu Leu Met His Met Leu Ser Ser Pro Asp Tyr Gln Ile Arg
74      165      170      175
76 tgg agc gca ggc cgg atg atc caa gct ctg tcc tcc cac gat gct ggg 637
77 Trp Ser Ala Gly Arg Met Ile Gln Ala Leu Ser Ser His Asp Ala Gly
78      180      185      190
80 acc cgg acc cag atc ctt ctg tca ttg agc caa caa gag gcc att gaa 685
81 Thr Arg Thr Gln Ile Leu Leu Ser Leu Ser Gln Gln Glu Ala Ile Glu
82      195      200      205
84 aag cac ctg gat ttt gat agc cgc tgc gct ctg ctt gca ctg ttc gcc 733
85 Lys His Leu Asp Phe Asp Ser Arg Cys Ala Leu Leu Ala Leu Phe Ala
86      210      215      220
88 cag gct act ctc acg gaa cac ccg atg tct ttc gag ggc gtt cag ctg 781
89 Gln Ala Thr Leu Thr Glu His Pro Met Ser Phe Glu Gly Val Gln Leu
90 225      230      235      240
92 cca cag gtc cca gga cgg ctg ctc ttc tcc ctg gta aaa cgc tac ctg 829
93 Pro Gln Val Pro Gly Arg Leu Leu Phe Ser Leu Val Lys Arg Tyr Leu
94      245      250      255
96 cac gtc acc ttc ctc ctg gat cgg ctg aac ggc gat gca ggg gat caa 877
97 His Val Thr Phe Leu Leu Asp Arg Leu Asn Gly Asp Ala Gly Asp Gln
98      260      265      270
100 gga gcc cag aac aac ttt agt cct gag gag ttg aat gta ggg agg ggc 925
101 Gly Ala Gln Asn Asn Phe Ser Pro Glu Glu Leu Asn Val Gly Arg Gly
102      275      280      285
104 cgg ctg gaa ctg gaa ttc agt atg gcc atg ggc act ctg atc tct gag 973
105 Arg Leu Glu Leu Glu Phe Ser Met Ala Met Gly Thr Leu Ile Ser Glu
106      290      295      300
108 ctg gtg cag gcc atg cgc tgg gac ggg gcc tca agc aga cca gag agt 1021
109 Leu Val Gln Ala Met Arg Trp Asp Gly Ala Ser Ser Arg Pro Glu Ser
110 305      310      315      320
112 tct tcc tcc tcc acc ttc cag cct cgg cca gca cag ttc cgc ccc tac 1069
113 Ser Ser Ser Ser Thr Phe Gln Pro Arg Pro Ala Gln Phe Arg Pro Tyr
114      325      330      335
116 acc cag cgt ttc agg agg tgg agg cgg ttt cgc ccc cgt gcc tgg ttt 1117
117 Thr Gln Arg Phe Arg Arg Ser Arg Arg Phe Arg Pro Arg Ala Ser Phe
118      340      345      350
120 gcc agt ttt aat acc tat gcc ttg tat gtg cgg gac acg ctg cgg ccc 1165
121 Ala Ser Phe Asn Thr Tyr Ala Leu Tyr Val Arg Asp Thr Leu Arg Pro
122      355      360      365
124 ggg atg cgg gta cgg atg ctg gag aat tac gag gag atc gct gct ggg 1213
125 Gly Met Arg Val Arg Met Leu Glu Asn Tyr Glu Glu Ile Ala Ala Gly
126      370      375      380
128 gat gag ggc cag ttc cga cag agc aat gat ggc gtt ccc cca gcg cag 1261

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132	gtg	ttg	tgg	gat	tca	aca	ggc	cat	acc	tac	tgg	gtg	cac	tgg	cac	atg	1309
133	Val	Leu	Trp	Asp	Ser	Thr	Gly	His	Thr	Tyr	Trp	Val	His	Trp	His	Met	
134				405					410						415		
136	ctg	gag	atc	ttg	ggc	ttt	gag	gaa	gac	atc	gag	gat	gtg	att	gat	att	1357
137	Leu	Glu	Ile	Leu	Gly	Phe	Glu	Glu	Asp	Ile	Glu	Asp	Val	Ile	Asp	Ile	
138				420					425					430			
140	gaa	gag	tta	cag	gag	cta	ggg	gcc	aat	gga	gca	ctg	agc	atc	gtc	ccg	1405
141	Glu	Glu	Leu	Gln	Glu	Leu	Gly	Ala	Asn	Gly	Ala	Leu	Ser	Ile	Val	Pro	
142			435					440					445				
144	cgc	tcc	cag	cgc	tgg	aag	ccc	ata	act	cag	ctc	ttt	gcc	gag	cct	tac	1453
145	Pro	Ser	Gln	Arg	Trp	Lys	Pro	Ile	Thr	Gln	Leu	Phe	Ala	Glu	Pro	Tyr	
146		450				455						460					
148	gtg	gta	ccc	gag	gag	gaa	gac	agg	gaa	gag	agc	gag	aac	ttg	acc	cag	1501
149	Val	Val	Pro	Glu	Glu	Glu	Asp	Arg	Glu	Glu	Ser	Glu	Asn	Leu	Thr	Gln	
150	465				470					475					480		
152	gct	gag	tgg	tgg	gag	ctc	ctc	ttc	ttc	atc	cgg	cag	ttg	agt	gag	gca	1549
153	Ala	Glu	Trp	Trp	Glu	Leu	Leu	Phe	Phe	Ile	Arg	Gln	Leu	Ser	Glu	Ala	
154				485					490						495		
156	gag	cgc	ctt	cac	atc	gtg	gat	ctc	ctg	caa	gac	cac	ctg	gaa	gag	gag	1597
157	Glu	Arg	Leu	His	Ile	Val	Asp	Leu	Leu	Gln	Asp	His	Leu	Glu	Glu		
158			500						505					510			
160	cgc	gtt	ctg	gac	tac	gat	atg	ctg	cct	gag	ctg	acc	gtg	ccc	gtt	gac	1645
161	Arg	Val	Leu	Asp	Tyr	Asp	Met	Leu	Pro	Glu	Leu	Thr	Val	Pro	Val	Asp	
162		515					520						525				
164	ttg	gcc	cag	gat	ctg	ctg	ttg	tct	ctg	cct	cag	caa	ctt	gag	gac	agt	1693
165	Leu	Ala	Gln	Asp	Leu	Leu	Leu	Ser	Leu	Pro	Gln	Gln	Leu	Glu	Asp	Ser	
166		530				535					540						
168	gct	ctg	agg	gac	ctg	ttc	agc	tgc	agt	gtc	tac	agg	aag	tat	ggg	ccc	1741
169	Ala	Leu	Arg	Asp	Leu	Phe	Ser	Cys	Ser	Val	Tyr	Arg	Lys	Tyr	Gly	Pro	
170	545				550					555					560		
172	gaa	gtc	ctg	gta	ggg	cat	cta	agc	tac	cca	ttt	gtg	cca	ggg	gcc	cag	1789
173	Glu	Val	Leu	Val	Gly	His	Leu	Ser	Tyr	Pro	Phe	Val	Pro	Gly	Ala	Gln	
174				565					570					575			
176	cca	aat	tta	ttc	gga	gcc	aat	gaa	gag	tct	gaa	gcc	aaa	gat	ccc	cca	1837
177	Pro	Asn	Leu	Phe	Gly	Ala	Asn	Glu	Glu	Ser	Glu	Ala	Lys	Asp	Pro	Pro	
178			580						585					590			
180	ctt	cag	agt	gcc	agc	cct	gcc	ctg	cag	cgc	ctg	gtg	gag	agc	ttg	ggc	1885
181	Leu	Gln	Ser	Ala	Ser	Pro	Ala	Leu	Gln	Arg	Leu	Val	Glu	Ser	Leu	Gly	
182			595				600						605				
184	ccc	gaa	ggg	gag	gtc	ctt	gtg	gaa	ctg	gaa	caa	gcc	ctc	ggc	tcc	gag	1933
185	Pro	Glu	Gly	Glu	Val	Leu	Val	Glu	Leu	Glu	Gln	Ala	Leu	Gly	Ser	Glu	
186		610				615						620					
188	gct	ccc	cag	gaa	act	gag	gtc	aag	tcc	tgc	ttg	ttg	cag	ctc	cag	gag	1981
189	Ala	Pro	Gln	Glu	Thr	Glu	Val	Lys	Ser	Cys	Leu	Leu	Gln	Leu	Gln	Glu	
190	625				630					635					640		
192	cag	ccc	cag	ccc	ttc	ctc	gct	ctg	atg	cgg	agc	ctg	gac	act	tcc	gcc	2029
193	Gln	Pro	Gln	Pro	Phe	Leu	Ala	Leu	Met	Arg	Ser	Leu	Asp	Thr	Ser	Ala	

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196	agc aac aag acc ctg cac ctc act gtg ctc aga atc tta atg cag ctg						2077	
197	Ser Asn Lys Thr Leu His Leu Thr Val Leu Arg Ile Leu Met Gln Leu							
198		660		665		670		
200	gtg aac ttc cca gag gcg ctg ttg cta ccc tgg cac gag gcc atg gat						2125	
201	Val Asn Phe Pro Glu Ala Leu Leu Pro Trp His Glu Ala Met Asp							
202		675		680		685		
204	gcc tgc gtg acc tgc ctt cgg tcc ccc aat act gac cga gag gtg ctc						2173	
205	Ala Cys Val Thr Cys Leu Arg Ser Pro Asn Thr Asp Arg Glu Val Leu							
206		690		695		700		
208	cag gaa cta atc ttt ttc ctg cac cgc ctg acc acc aca agc cgg gac						2221	
209	Gln Glu Leu Ile Phe Phe Leu His Arg Leu Thr Thr Thr Ser Arg Asp							
210	705		710		715		720	
212	tat gcg gtg ata cta aac cag cat gga gcc cgg gac gcc atc tcc aaa						2269	
213	Tyr Ala Val Ile Leu Asn Gln His Gly Ala Arg Asp Ala Ile Ser Lys							
214		725		730		735		
216	gtc ctg gaa aag cac cga ggg aaa ctg gag ttg gct cag gag ctg cgg						2317	
217	Val Leu Glu Lys His Arg Gly Lys Leu Glu Leu Ala Gln Glu Leu Arg							
218		740		745		750		
220	gat atg gtg tcc aag tgt gag aag cat gcc cac ctc tac cgg aaa ctc						2365	
221	Asp Met Val Ser Lys Cys Glu Lys His Ala His Leu Tyr Arg Lys Leu							
222		755		760		765		
224	acc acc aac atc ctg gcc ggt tgc atc cag atg gtc ctg ggt cag att						2413	
225	Thr Thr Asn Ile Leu Gly Gly Cys Ile Gln Met Val Leu Gly Gln Ile							
226		770		775		780		
228	gaa gac cac aga cga acc cac cgg ccc atc caa atc cca ttc ttt gat						2461	
229	Glu Asp His Arg Arg Thr His Arg Pro Ile Gln Ile Pro Phe Phe Asp							
230	785		790		795		800	
232	gtg ttt ctc aga tat ctg tgc cag ggc tcc agt gag gaa atg aag aaa						2509	
233	Val Phe Leu Arg Tyr Leu Cys Gln Gly Ser Ser Glu Glu Met Lys Lys							
234		805		810		815		
236	aac agg tac tgg gag aag gtg gag gtg tcc tcc aac cca cag cgg gcc						2557	
237	Asn Arg Tyr Trp Glu Lys Val Glu Val Ser Ser Asn Pro Gln Arg Ala							
238		820		825		830		
240	agc agg ctg acg gac cgc aac ccc aag acc tac tgg gag tcc agt ggc						2605	
241	Ser Arg Leu Thr Asp Arg Asn Pro Lys Thr Tyr Trp Glu Ser Ser Gly							
242		835		840		845		
244	agg gcc ggc tcc cac ttc atc acc tta cac atg cgc cca ggt gtc atc						2653	
245	Arg Ala Gly Ser His Phe Ile Thr Leu His Met Arg Pro Gly Val Ile							
246		850		855		860		
248	atc agg cag ctg act cta ctg gtg gct ggc gag gac tca agc tac atg						2701	
249	Ile Arg Gln Leu Thr Leu Leu Val Ala Gly Glu Asp Ser Ser Tyr Met							
250	865		870		875		880	
252	cca gcc tgg gtg gtg gta tgc ggg ggc aac agc atc aag tcc gtt aat						2749	
253	Pro Ala Trp Val Val Val Cys Gly Gly Asn Ser Ile Lys Ser Val Asn							
254		885		890		895		
256	aaa gaa ctc aac acg gta aac gtg atg ccc tct gcc agc cgg gtg acc						2797	
257	Lys Glu Leu Asn Thr Val Asn Val Met Pro Ser Ala Ser Arg Val Thr							
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260 ctc ctg gag aac ctg acc cgc ttc tgg ccc atc atc caa atc aga ata 2845
261 Leu Leu Glu Asn Leu Thr Arg Phe Trp Pro Ile Ile Gln Ile Arg Ile
262          915          920          925
264 aag cgc tgc cag cag ggt ggc att aac acg cgc atc cgg ggc cta gag 2893
265 Lys Arg Cys Gln Gln Gly Gly Ile Asn Thr Arg Ile Arg Gly Leu Glu
266          930          935          940
268 gtg ctg ggc ccc aag ccc acc ttc tgg cca gtg ttc cga gag caa ctg 2941
269 Val Leu Gly Pro Lys Pro Thr Phe Trp Pro Val Phe Arg Glu Gln Leu
270 945          950          955          960
272 tgc cgg cac acg cgc ctc ttc tac atg gtt cgg gcc cag gca tgg agt 2989
273 Cys Arg His Thr Arg Leu Phe Tyr Met Val Arg Ala Gln Ala Trp Ser
274          965          970          975
276 cag gac ata gca gag gac cgc cgg agc ctt ctg cac ctg agt tct agg 3037
277 Gln Asp Ile Ala Glu Asp Arg Arg Ser Leu Leu His Leu Ser Ser Arg
278          980          985          990
280 cta aat ggg gct ctg cgc cat gaa cag aat ttt gca gag cgc ttc ctt 3085
281 Leu Asn Gly Ala Leu Arg His Glu Gln Asn Phe Ala Glu Arg Phe Leu
282          995          1000          1005
284 cct gat atg gag gcc gcc caa gca ctg agc aag acc tgc tgg gag gcg 3133
285 Pro Asp Met Glu Ala Ala Gln Ala Leu Ser Lys Thr Cys Trp Glu Ala
286          1010          1015          1020
288 ctg gtc agc ccc ctg gtg cag aac att aca tct ccc gat gag gac agc 3181
289 Leu Val Ser Pro Leu Val Gln Asn Ile Thr Ser Pro Asp Glu Asp Ser
290 1025          1030          1035          1040
292 acc agc tcc ttg ggc tgg ctg ctg gat cag tac ttg gga tgc agg gag 3229
293 Thr Ser Ser Leu Gly Trp Leu Leu Asp Gln Tyr Leu Gly Cys Arg Glu
294          1045          1050          1055
296 gct gcc tac aat ccc cag agc agg gct gct gct ttc tcc tcc cgg gtt 3277
297 Ala Ala Tyr Asn Pro Gln Ser Arg Ala Ala Ala Phe Ser Ser Arg Val
298          1060          1065          1070
300 cgc cgc ctt acc cac ctc ctg gtc cat gtg gag ccc cgt gag gca gca 3325
301 Arg Arg Leu Thr His Leu Leu Val His Val Glu Pro Arg Glu Ala Ala
302          1075          1080          1085
304 cct ccg gtg gtg gcc atc cct cga tcc aag ggc agg aac aga atc cat 3373
305 Pro Pro Val Val Ala Ile Pro Arg Ser Lys Gly Arg Asn Arg Ile His
306          1090          1095          1100
308 gac tgg agc tac ttg atc acc cgg ggc ctt cca agt agc atc atg aag 3421
309 Asp Trp Ser Tyr Leu Ile Thr Arg Gly Leu Pro Ser Ser Ile Met Lys
310 1105          1110          1115          1120
312 aac ctg acc cgc tgt tgg cgg tct gtg gtg gag gag cag atg aac aag 3469
313 Asn Leu Thr Arg Cys Trp Arg Ser Val Val Glu Glu Gln Met Asn Lys
314          1125          1130          1135
316 ttt ctc agt gcg tcc tgg aaa gac gat gat ttc gta ccc cgc tat tgc 3517
317 Phe Leu Ser Ala Ser Trp Lys Asp Asp Asp Phe Val Pro Arg Tyr Cys
318          1140          1145          1150
320 gag cgc tat tac gtc ctg cag aag tcc agc tca gag ctg ttt ggg cca 3565
321 Glu Arg Tyr Tyr Val Leu Gln Lys Ser Ser Ser Glu Leu Phe Gly Pro
322          1155          1160          1165
324 cga gct gcc ttc ttg ctg gca atg cgg aat ggc tgt gct gat gct gtg 3613

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L:10 M:270 C: Current Application Number differs, Replaced Current Application Number

L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date